DISCUSSION AND CORRESPONDENCE.

THE FLORIDA SEA-MONSTER.

SINCE the publication of the brief note in SCIENCE, March 5th, I have made additional studies of the specimens received, which confirm the cetacean affinities more definitely. The extreme firmness and toughness of the thick elastic masses of integument show that the structure must have been intended for resistance to blows and to great pressure, and could not have pertained to any part of an animal where mobility is necessary. They are composed of a complex of strong *elastic* connective tissue fibers, like those of cetaceans. There are *no muscular fibers* present in any of the parts sent. This lack of muscular tissue and the resistant nature of the integument are sufficient to show that the creature could not have been a cephalopod, for in that group a highly contractile muscular tissue is essential.

The structure found is closer to that of the integument of the upper part of the head and nose of a sperm whale than to that of any other structure known to me. It is probable, therefore, that the great bag-shaped mass represents nearly the whole upper part of the head of such a creature, detached from the skull.*

A rough area, shown in the latest photographs of the under side of the upturned mass, may indicate the area that was attached to the skull. It may have belonged to a very large example of a common sperm whale, with an abnormally developed and perhaps diseased nose; if not, then it probably pertains to some entirely unknown creature of the same family. It seems hardly probable that any such large cetacean remains to be discovered. The shape of the mass, and especially of the large, round, closed end supposed to represent the nose, is quite unlike the head of the sperm whale, which is truncated high and narrow in front and projects but little beyond the upper jaw. Moreover, nothing corresponding to the blowhole of a sperm whale has been discovered. Some of the photographs show an indentation near the large end on the upper side, but Dr. Webb informed me that it was only a pit or 'sulcus' about two feet long and six inches deep, perhaps due to injury. The internal cavity, so far as made out, seems to be unlike that of the sperm whale. Therefore, the view that it may be from an abnormal or normal sperm whale must be regarded as a supposition or theory that still needs more evidence to support it, but is at present the most plausible.

A. E. VERRILL.

NEW HAVEN, March 12, 1897.

* This view has been adopted by me in an article now in type for the next number of *The American Journal of Science.*

THE FLORIDA MONSTER.

PROFESSOR VERRILL would be justified in making a much more emphatic statement (see SCIENCE for March 5th) than that the structure of the masses of integument from the 'Florida monster' resembles blubber, and the creature was probably related to the whales. The substance looks like blubber, and smells like blubber and it *is* blubber, nothing more nor less. There would seem to be no better reason for supposing that it was in the form of a 'bag-like structure' than for supposing that stumps of arms were present. The imaginative eye of the average untrained observer can see much more than is visible to anyone else.

F. A. LUCAS.

WASHINGTON, D. C., March 8, 1897.

GIBBERS.

OBSERVERS the world over have reported, in wind-swept places, the occurrence of pebbles having carved and polished surfaces due to the action of the natural sand blast. German geologists first called these pebbles 'Kantegerölle,' from the edges ground on them by intersecting planes of wear. Walther next proposed to call them 'facettengerölle,' because the facets were the essential features, the edges resulting from the development of the planes. But not all sand-blasted pebbles are facetted. Planes and edges are not more common than concave surfaces and pits; or, as Gilbert found in the Wheeler Survey, a vermicular fret-work wear of the rock surface. For these reasons the name 'glyptolith' was proposed by the writer in an account of the pebbles seen in southern New England. (Am. Jour. Sci. XLVII., 1894, pp.